

## ABSTRACT OF THE DISCLOSURE

The magnetoresistance effect element is of a multilayered structure having at least magnetic layers and an intermediate layer of an insulating material, a semiconductor or an antiferromagnetic material against the magnetic layers, and the magnetoresistance effect element has terminals formed at least on the opposite magnetic layers, respectively, so that a current flows in the intermediate layer. The film surfaces of all the magnetic layers constituting the magnetoresistance effect element are opposed substantially at right angles to the recording surface of a magnetic recording medium. Therefore, the area of the magnetic layers facing the recording surface of the magnetic recording medium can be extremely reduced, and thus the magnetic field from a very narrow region of the high-density recorded magnetic recording medium can be detected by the current which has a tunneling characteristic and passes through the intermediate layer.